What is claimed is:

1. A tracking servo operating method comprising:

applying a beam spot on an optical disk on which a track is formed;

receiving feedback light from said optical disk by a light receiving unit, which is equipped with a multi-divided photodetector comprising a first photo- detecting portion and a second photo-detecting portion being mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk, receive feedback light from said optical disk; and

controlling an actuator through a driver so that a servo operation in which said beam spot tracks said track is performed according to an output from said light receiving unit;

wherein control is so exerted that a high frequency differential signal is produced by calculating a difference between a first high frequency signal obtained by having said first photo-detecting portion receive first feedback light from said optical disk and a second high frequency signal obtained by having said second photo-detecting portion receive second feedback light from said optical disk and that, after a tracking error signal has been produced based on, at least, the produced high frequency differential signal, the produced tracking error signal is binarized and a tracking error edge signal indicating an edge of rising and falling of the binarized tracking error signal is extracted and that said first and second high frequency signals are binarized and, when the binarized first and second high frequency signals are at a specified same level, an operation

of pulling in a tracking servo is performed in response to said tracking error edge signal.

2. The tracking servo operating method according to Claim 1, wherein setting is made so that said tracking error signal becomes 0 (zero) when said beam spot is positioned at a center of said track.

3. The tracking servo operating method according to Claim 1, wherein setting is made so that said tracking error edge signal is extracted when said beam spot has reached either of a center of said track or a center of a region between the two tracks adjacent to each other.

4. The tracking servo operating method according to Claim 1, wherein control is exerted so that, after a band of each of said first and second high frequency signals has been filtered, the filtered signals are binarized and, when both the binarized first and second high frequency signals are at a low level, an operation of pulling in a tracking servo is performed in response to said tracking error edge signal.

5. The tracking servo operating method according to Claim 1, wherein each of said first and second photo-detecting portions each are further divided into a front photo-detecting portion and a rear photo-detecting portion along the circumference direction of said track, and wherein said first and second high frequency signals each are obtained by adding a front output signal from said front photo-detecting portion and a rear output signal from

said rear photo-detecting portion.

6. The tracking servo operating method according to Claim 1, wherein movement of said beam spot by said actuator is accomplished by movement of an objective lens in a light source.

7. The tracking servo operating method according to Claim 1, wherein said light receiving unit further comprises a first sub-photodetector mounted in a position being isolated left by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a first left photo-detecting portion and a first right photo-detecting portion mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk and a second sub-photodetector mounted in a position being isolated right by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a second left photo-detecting portion and a second right photo-detecting portion mounted in a manner so as to be divided right and left relative to the circumferential direction of said optical disk, and hereby being so configured as to receive feedback light of a sub-beam from said optical disk, said sub-beam being obtained by dividing a beam output from a light source and to obtain a first detecting signal by adding signals output from said first and second left photo-detecting portions in said first and second sub-photodetectors and a second detecting signal by adding signals output from said first and second right photo-detecting portions in said first and second sub-photodetectors, and to produce a

sub-differential signal by calculating a difference between the obtained first detecting signal and the obtained second detecting signal, and then to produce said tracking error signal based on a difference between the produced sub-differential signal and said high frequency differential signal.

8. The tracking servo operating method according to Claim 1, wherein each of said first and second photo-detecting portions each are further divided into a front photo-detecting portion and a rear photo-detecting portion along the circumference direction of said track, and wherein said first and second high frequency signals each are obtained by adding a front output signal from said front photo-detecting portion and a rear output signal from said rear photo-detecting portion, and furthermore,

wherein said light receiving unit further comprises a first sub-photodetector mounted in a position being isolated left by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a first left photo-detecting portion and a first right photo-detecting portion mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk and a second sub-photodetector mounted in a position being isolated right by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a second left photo-detecting portion and a second right photo-detecting portion mounted in a manner so as to be divided right and left relative to the circumferential direction of said optical disk, and hereby being so configured as to receive feedback light of a sub-beam from said

optical disk, said sub-beam being obtained by dividing a beam output from a light source and to obtain a first detecting signal by adding signals output from said first and second left photo-detecting portions in said first and second sub-photodetectors and a second detecting signal by adding signals output from said first and second right photo-detecting portions in said first and second sub-photodetectors, and to produce a sub-differential signal by calculating a difference between the obtained first detecting signal and the obtained second detecting signal, and then to produce said tracking error signal based on a difference between the produced sub-differential signal and said high frequency differential signal.

9. A tracking servo apparatus comprising:

a light source to apply a beam spot on an optical disk on which a track is formed;

a light receiving unit having a multi-divided photodetector comprising a first photo-detecting portion and a second photo-detecting portion being mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk to produce a first high frequency signal by having said first photo-detecting portion receive first feedback light from said optical disk and a second high frequency signal by having said second photo-detecting portion receive second feedback light from said optical disk and to produce a high frequency differential signal by calculating a difference between the produced first high frequency signal and the produced second high frequency signal and to produce a tracking error signal based on, at least, the produced high frequency differential signal;

a controlling unit to binarize said tracking error signal fed from said light receiving unit and to extract a tracking error edge signal indicating an edge of rising and falling of the binarized tracking error signal and, after having filtered a band of each of said first and second high frequency signals fed from said light receiving unit, to binarize the filtered signals and to produce, when the binarized first and second high frequency signals are at a specified same level, a control signal to start a servo operation in response to said tracking error edge signal;

a driver to produce a driving signal according to said control signal; and

an actuator to move said beam spot according to said driving signal fed from said driver,

wherein control is exerted so that an operation of pulling in a tracking servo is performed in response to said tracking error edge signal.

10. The tracking servo operating method according to Claim 9, wherein setting is made so that said tracking error signal becomes 0 (zero) when said beam spot is positioned at a center of said track.

11. The tracking servo operating method according to Claim 9, wherein setting is made so that said tracking error edge signal is extracted when said beam spot has reached either of a center of said track or a center of a region between the two tracks adjacent to each other.

12. The tracking servo apparatus according to Claim 9, wherein

control is exerted so that, after a band of each of said first and second high frequency signals has been filtered, the filtered signals are binarized and, when both the binarized first and second high frequency signals are at a low level, an operation of pulling in a tracking servo is performed in response to said tracking error edge signal.

13. The tracking servo operating apparatus according to Claim 9, wherein each of said first and second photo-detecting portions each are further divided into a front photo-detecting portion and a rear photo-detecting portion along the circumference direction of said track, and wherein said first and second high frequency signals each are obtained by adding a front output signal from said front photo-detecting portion and a rear output signal from said rear photo-detecting portion.

14. The tracking servo apparatus according to Claim 9, wherein movement of said beam spot by said actuator is accomplished by movement of an objective lens in said light source.

15. The tracking servo operating method according to Claim 9, wherein said light receiving unit further comprises a first sub-photodetector mounted in a position being isolated left by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a first left photo-detecting portion and a first right photo-detecting portion mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk and a second sub-photodetector mounted in a position being

isolated right by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a second left photo-detecting portion and a second right photo-detecting portion mounted in a manner so as to be divided right and left relative to the circumferential direction of said optical disk, and hereby being so configured as to receive feedback light of a sub-beam from said optical disk, said sub-beam being obtained by dividing a beam output from a light source and to obtain a first detecting signal by adding signals output from said first and second left photo-detecting portions in said first and second sub-photodetectors and a second detecting signal by adding signals output from said first and second right photo-detecting portions in said first and second sub-photodetectors, and to produce a sub-differential signal by calculating a difference between the obtained first detecting signal and the obtained second detecting signal, and then to produce said tracking error signal based on a difference between the produced sub-differential signal and said high frequency differential signal.

16. The tracking servo operating method according to Claim 9, wherein each of said first and second photo-detecting portions each are further divided into a front photo-detecting portion and a rear photo-detecting portion along the circumference direction of said track, and wherein said first and second high frequency signals each are obtained by adding a front output signal from said front photo-detecting portion and a rear output signal from said rear photo-detecting portion, and furthermore,

wherein said light receiving unit further comprises a first

sub-photodetector mounted in a position being isolated left by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a first left photo-detecting portion and a first right photo-detecting portion mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk and a second sub-photodetector mounted in a position being isolated right by 1/2 pitches of said track in a direction of crossing said track from a center of said multi-divided photodetector and comprising a second left photo-detecting portion and a second right photo-detecting portion mounted in a manner so as to be divided right and left relative to the circumferential direction of said optical disk, and hereby being so configured as to receive feedback light of a sub-beam from said optical disk, said sub-beam being obtained by dividing a beam output from a light source and to obtain a first detecting signal by adding signals output from said first and second left photo-detecting portions in said first and second sub-photodetectors and a second detecting signal by adding signals output from said first and second right photo-detecting portions in said first and second sub-photodetectors, and to produce a sub-differential signal by calculating a difference between the obtained first detecting signal and the obtained second detecting signal, and then to produce said tracking error signal based on a difference between the produced sub-differential signal and said high frequency differential signal.

17. A tracking servo apparatus comprising:

a light source to apply a beam spot on an optical disk on

which a track is formed;

a light receiving means having a multi-divided photodetector comprising a first photo-detecting portion and a second photo-detecting portion being mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk to produce a first high frequency signal by having said first photo-detecting portion receive first feedback light from said optical disk and a second high frequency signal by having said second photo-detecting portion receive second feedback light from said optical disk and to produce a high frequency differential signal by calculating a difference between the produced first high frequency signal and the produced second high frequency signal and to produce a tracking error signal based on, at least, the produced high frequency differential signal;

a controlling means to binarize said tracking error signal fed from said light receiving means and to extract a tracking error edge signal indicating an edge of rising and falling of the binarized tracking error signal and, after having filtered a band of each of said first and second high frequency signals fed from said light receiving means, to binarize the filtered signals and to produce, when the binarized first and second high frequency signals are at a specified same level, a control signal to start a servo operation in response to said tracking error edge signal;

a driver to produce a driving signal according to said control signal; and

an actuator to move said beam spot according to said driving signal fed from said driver,

whereby control is exerted so that an operation of pulling in a tracking servo is performed in response to said tracking error

edge signal.

18. An optical disk device provided with a tracking servo apparatus comprising:

a light source to apply a beam spot on an optical disk on which a track is formed;

a light receiving unit having a multi-divided photodetector comprising a first photo-detecting portion and a second photo-detecting portion being mounted in a manner so as to be divided right and left relative to a circumferential direction of said optical disk to produce a first high frequency signal by having said first photo-detecting portion receive first feedback light from said optical disk and a second high frequency signal by having said second photo-detecting portion receive second feedback light from said optical disk and to produce a high frequency differential signal by calculating a difference between the produced first high frequency signal and the produced second high frequency signal and to produce a tracking error signal based on, at least, the produced high frequency differential signal;

a controlling unit to binarize said tracking error signal fed from said light receiving unit and to extract a tracking error edge signal indicating an edge of rising and falling of the binarized tracking error signal and, after having filtered a band of each of said first and second high frequency signals fed from said light receiving unit, to binarize the filtered signals and to produce, when the binarized first and second high frequency signals are at a specified same level, a control signal to start a servo operation in response to said tracking error edge signal;

a driver to produce a driving signal according to said

control signal; and

an actuator to move said beam spot according to said driving signal fed from said driver,

whereby control is exerted so that an operation of pulling in a tracking servo is performed in response to said tracking error edge signal.